

REMARKS/ARGUMENTS

Favorable reconsideration of this application in view of the above amendments and following remarks is respectfully requested.

Claims 1-24 and 27-51 are pending in this application. Claims 28-51 are withdrawn from consideration. By this amendment, Claims 1, 20 and 28 are amended; and no claims are canceled or added herewith. It is respectfully submitted that no new matter is added by this amendment.

In the outstanding Office Action, Claims 1-24 and 27 were rejected under 35 U.S.C. § 112, second paragraph; and Claims 1-24 and 27 were rejected under 35 U.S.C. § 102(b) as anticipated by U.S. Patent No. 6,634,982 to Miki.

With respect to the rejection under 35 U.S.C. § 112, second paragraph, Claims 1, 20 and 28 are amended by the present amendment to clarify the features recited therein. Accordingly, withdrawal of the rejection under 35 U.S.C. § 112 is respectfully requested.

With respect to the rejection of the claims under 35 U.S.C. § 102, that rejection is respectfully traversed. In particular, independent Claims 1 and 20 similarly recite in part, deciding whether or not a predetermined prerequisite condition for lowering the pressure is satisfied, lowering the pressure by a preset value when the condition is satisfied, and setting the pressure to a value obtained by adding a pressure corresponding to the road surface input to a lowered minimum value of said pressure, in case the slip between the transmission members is not detected in spite of lowering the pressure by the preset value, even if the prerequisite condition is not satisfied during lowering the pressure.

In contrast, Miki discusses that when a belt pinching pressure is high, torque transmission efficiency becomes low and while the belt pinching pressure might be lowered, the torque transmitted may vary over a larger than acceptable range when the vehicle encounters a rough road for example. Miki discusses increasing the pinching pressure using

servo 135 by an allowance m to prevent slippage from occurring. As shown in Fig. 1 of Miki, the torque variation estimation processing means 92 estimates whether or not the transmission torque will tend to vary easily during travel based on the shift schedule set in the shift schedule setting processing. Then the pinching pressure change processing means 93 corrects the allowance m and changes the pinching pressure for the belt 132. As discussed in columns 14-15 of Miki, the correction values $\delta 1$ to $\delta 3$ are preset in accordance with the degree of the transmission torque variation. The correction values $\delta 1$ to $\delta 3$ are set by estimating how the transmission torque will vary in the respective travel areas such as urban road, a congested road, a suburban road. Thus, according to the teachings in Miki, the pinching pressure is prevented from constantly increasing because the transmission torque variation during travel is estimated to vary the allowance m . That is, the allowance m is increased when the transmission torque tends to vary easily and the pinching pressure is thereby increased, and is decreased when the transmission torque hardly varies and the pinching pressure is thereby lowered.

Accordingly, Miki fails to disclose or suggest all the features of the claimed invention. In both Miki and embodiments of the present invention, a pressure estimating a safety factor for the belt slip, is applied to the torque. That is, the pressure corresponding to the road surface input of the present invention and the allowance m of Miki respectively corresponds to the pressure. As such, the difference between the present invention and Miki is a base pressure to which the pressure corresponding to the safety factor is applied. However, according to one or more embodiments of the present invention, the lowest value obtained when lowering the pressure is stopped in the procedure of lowering the pressure for detecting slips and is adapted as a base pressure. Therefore, the base pressure is changed. For this reason, the clamping pressure or the applying pressure can be set as low as possible.

In contrast, in Miki, only the allowance m is changed. Thus, the base pressure is preset according to the input torque and change by only the input torque.

Further, the Office Action does not cite to a specific teachings in Miki for the claim features discussed above with respect to setting the pressure to a value obtained by adding a pressure corresponding to the road surface input to a lowered minimum value of said pressure, in case the slip between the transmission members is not detected in spite of lowering the pressure by the preset value, even if the prerequisite condition is not satisfied during lowering the pressure. For example, one objective of the present invention is to provide a control system for a power transmission mechanism in which a transmission torque capacity between transmission members is set on the basis of a slip condition there between. In one or more examples of the invention, the pressure is lowered by the preset value repeatedly to search the slip limit pressure. That is, when the pressure lowering control is continued, slips occur inevitably. However, as set forth in the claimed invention, the pressure lowering control assumes a satisfaction of a prerequisite condition. As such, the pressure lowering control may be stopped although a slip does not occur. That is, even if the pressure is lowered, there is a case in which the slip between the transmission members is not detected if the lowering amount is relatively small or the lowering of the pressure is restricted. However, the pressure during the lowering process can be detected. Therefore, according to an example of the present invention, the lowered minimum value of the pressure obtained in the course of lowering the pressure is utilized in case the slip is not detected. As set forth in Claim 1, the pressure is set to a pressure in which a pressure corresponding to the road surface input is added to the lowered minimum value of the pressure. In other words, the lowered minimum value of the pressure is adopted instead of a slip limit pressure, and the road surface input is added thereto even if the prerequisite condition is not satisfied during

lowering the pressure. Please see the disclosure on pages 23-24 in the present specification with respect to the explanation of e.g., S20, S51 etc.

Accordingly, withdrawal of the rejection of the claims under 35 U.S.C. § 102 is respectfully requested.

Consequently, for the reasons discussed in detail above, no further issues are believed to be outstanding in the present application, and the present application is believed to be in condition for formal allowance. Therefore, a Notice of Allowance is earnestly solicited.

Should the Examiner deem that any further action is necessary to place this application in even better form for allowance, the Examiner is encouraged to contact the undersigned representative at the below listed telephone number.

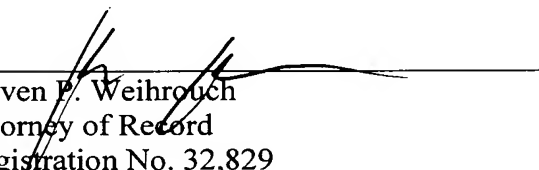
Respectfully submitted,

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